## REMARKS

Claims 11-26 are pending in the subject application. Claims 1-10 have been previously cancelled. Claims 18-24 have been amended. No new matter has been added.

## Rejection under 35 U.S.C. § 112

Claims 19-21 have been rejected under 25 U.S.C. § 112, second paragraph, for failing to provide antecedent basis for recitations in the claims to "the method of claim 18" and as being incomplete for omitting essential steps. Applicant has amended claims 19-21 to recite "the composition of claim" thereby reflecting proper antecedent basis for recitations therein and correcting any omitted essential steps. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection.

## Rejected under 35 U.S.C. § 103

Claims 11-26 have been also been rejected under 35 U.S.C. § 103(a) as being unpatentable over Broudy et al. in view of WO 97-24373 (Lopez et al.). Applicant respectfully submits that the combined teachings of Broudy et al. and Lopez et al. do not disclose or teach the claimed compositions for impairing and methods for impairing, purifying and purging hematopoietic cells *that expresses CD123 but do not significantly express CD131*. Applicant has discovered novel compositions and methods for impairing, purifying and/or purging a different cell type, not suggested or taught by either Broudy or Lopez. At best, Lopez discloses a neutralizing antibody that antagonizes IL-3 functions to treat cancer in progenitor cells expressing both CD123 and CD131. The antibody of Lopez merely antagonizes the function of the fully dimerized IL-3R and fails to recognize the claimed methods of impairing, purifying and

purging different progenitor cells that express CD123 (IL-3R $\alpha$ ) but which do not significantly express CD131 (IL-3R $\beta$ ). Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection.

Claims 11-26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of U.S. Patent No. 5,489,516 (Broudy et al.) and in view of Eur. J. Haematol. 1999, 63, 1-10 (Koubek et al.) and U.S. Patent No. 4,340,535 (Voisin et al.). Applicant respectfully submits that the combined teachings of Broudy et al., Koubek et al. and Voisin et al. do not disclose or teach the claimed composition for impairing, and methods of impairing, purifying and purging hematopoietic cells *that expresses CD123 but do not significantly express CD131*. Applicant has discovered novel compositions and methods for impairing, purifying and/or purging a different cell type, not suggested or taught by these cited references. Koubek et al. merely discloses the Lopez antibody which antagonizes the function of the fully dimerized IL-3R and fails to recognize the claimed methods of impairing, purifying and purging different progenitor cells that express CD123 (IL-3Rα) but which do not significantly express CD131 (IL-3Rβ). Voisin et al. does not cure this deficiency.

## **CONCLUSION**

Applicants therefore respectfully request an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.

U.S. Patent Application No.: 10/830,089

Attorney Docket No. 050229-0436

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Please recognize our Customer No. 20277

Kelli Watson Francuzenko Registration No. 47,170

as our correspondence address.

600 13<sup>th</sup> Street, N.W. Washington, DC 20005-3096 Phone: 202.756.8000 KWF:cac

Facsimile: 202.756.8087 **Date: December 5, 2006** 

WDC99 1319360-1.050229.0436